QUESTIONS & ANSWERS RFP # 13-010-20 INFO HUB ARCHITECTURE DUE: DECEMBER 27, 2012 SHELBY COUNTY GOVERNMENT

4 The ESB must provide support for portlets to help user interaction

Q: Portlets are by definition Java based. Is Shelby County open to other technologies for user interaction, such as .NET?

A: Yes, but the interfaces to the core backend services should only be webservice based

9 The ESB must support or provide connectivity to Advanced Messaging Queuing Protocol (AMQP) implementations for enterprise messaging. At a minimum, this should include email, SNMP

Q: Is Shelby County open to alternatives to AMQP as long as they provide the same functionality?

A: Yes. The goal is to ensure that we can interact with a variety of systems in the future.

17 The ESB must provide the ability to create adapter services without coding

Q: Can you expand upon how you would like to be able to create adapter services without coding?

A: Using WYSIWYG type tools. We realize that it is not always possible to provide this without any coding, however, the middleware should provide easy to use toolset that would handle most commonly used types of interfaces.

21 The ESB must support DB Insert Listener; i.e., the ESB should, with the help of suitable components, be able to monitor databases to detect record insertions

Q: Is it acceptable to accomplish this using triggers and event tables?

A: We believe that this should be done carefully. The middleware should not expose too much of the RDBMS. The middleware MUST encapsulate this to the extent possible.

22 The ESB must provide the ability to build Web Service listeners with minimal coding

Q: How do you define minimal coding?

A: Ability to implement a listener with as little customization as necessary, preferably with just a few lines of code. As mentioned in response to question 17, the middleware MUST provide easy to use tools that are capable of introspecting web services, producing the server and client side stubs.

25 The ESB must provide the ability to expose a web service as a portlet

Q: Can you give more detail as to why this is required? Are there alternative approaches to the desired functionality you would accept?

A: The goal is to make it easy for Shelby county IT staff to expose new services (query / response) to its constituents on its internal and external websites. Alternate technologies are OK but the middleware should be easy to use in this regard.

27a Scanned PDF (additional plugins OK)

Q: In what way will the PDFs need to be handled? Just moving from point to point, or parsing and transforming the contents?

A: If there is different pricing based on how PDFs can be handled, then break out the options.

30 The ESB must provide support for business applications to enforce access controls

Q: Can you provide an example of this?

A: Agencies might choose to restrict the kind of information that is returned on a query based on who (authorization-level, agency-affiliation, etc.) is making a given request. The access level could also be coarse-grained as determined by the business processes in place.

34 The ESB must provide a simulation engine needs to identify potential process bottlenecks before a process is deployed

Q: Bottleneck identification is currently handled as part of our system integration and user acceptance testing process. Is this acceptable to Shelby County?

A: This is an important need, we often face issues with external services. Being able to identify potential bottlenecks during integration testing phase is important. The middleware must provide adequate support for this functionality. If this needs to be provided by additional modules or as bespoke development, please identify them accordingly.

37 The ESB must support the configuration for 24x7x365 uptime

Q: High availability architectures are possible, but are not covered in the architecture listed in this RFP. Can we suggest the required architecture as part of our response?

A: Yes, please factor in DR as well.

47 The ESB shall be compliant with security standards established by the PCI Security Standards Council for transmitting, processing, storing and accepting electronic financial transactions (credit/debit cards, ACH transfers, etc.)

Q: Why did the County choose these standards over the FBI CJIS security standards?

A: We envision that certain services that impact our user base might need to support credit card transactions (commissary, money transfers to inmates, background checks, etc). FBI CJIS security standards are preferable for the overall solution, but financial related transactions must be PCI compliant.

63 The ESB must include out of the box portal execution environment

Q: Our solution includes a portal environment, but it must be customized to meet Shelby County's needs. Is this acceptable? If not, can you provide more detail of what you are looking for?

A: Yes, we do expect a degree of customization.

76 The ESB must provide built in facilities for change control/management

Q: This is handled by the development environment and processes around development. Is this approach acceptable to Shelby County?

A: Yes.

79 The ESB must provide for archival capabilities for application modules

Q: This is handled by the development environment and processes around development. Is this approach acceptable to Shelby County?

A: Yes

80 The ESB must provide control access to protocol adapters

Q: Can you provide an example of this?

A: This is also intended to ensure that only authorized users are able to change configuration parameters of adapters / connectors. A badly configured adapters might break the flow of information.

81 The ESB must provide control access to production environments

Q: Can you provide an example of this?

A: For example, only certain users should be allowed to deploy functionality into production.

82 The ESB must provide support for versioning

Q: This is handled by the development environment and processes around development. Is this approach acceptable to Shelby County?

A: Yes, but this needs to be handled in conjunction with the ability to control the deployment of new functionality into production.

86 The ESB must provide support for alerting based on service level agreements

Q: Can you provide the service level agreements and the types of alerts required?

A: For example, if a process is not completed within x amount of time, notify support personnel. Notification could be by email or some other mechanism.

Generally, pertaining to required customization

Q: For items that will require customization, much more detailed requirements gathering will need to be done before an accurate estimate can be developed. Is there a strategic plan or other document that lays out detailed requirements for the project?

A: Data exchanges and IEPD development will be described in a future RFP seeking Professional Services. No specific plans about these requirements will be released at this time.

Section X. CONTRACT REQUIREMENTS

26. Source Code

The Provider, at no cost to Shelby County, shall place the entire set of source code for the proposed solution with an authorized escrow agent.

Q: We will place all customizations and development for Shelby County in escrow. Our solution is built on an internationally recognized third party platform (IBM) of which Shelby County will own a copy as part of the engagement. Is this acceptable for Shelby County's purposes?

A: Yes

- Q: What is the use case for ADFS? What are you trying to secure? e.g. user interaction? Transactions processed by the ESB? (Requirement 6)
 A: We expect to be able to do data level access controls based on the authorization profiles of the users who instigate queries or destination systems. We expect these profiles to be stored in an ADFS. We also expect to be able to manage these profiles OUTSIDE of the ESB toolset.
- 2. Q: Are you expecting the ESB to provide policy enforcement, or would access policies be provided by a 3rd party mediation layer that the ESB would work with? (Requirement 12)
 - A: We expect the ESB to provide hooks to help with this.
- Q: Is the County expecting the ESB to support the County's existing certificate management infrastructure, or is the ESB expected to provide a certificate management infrastructure? Please describe. (Requirement 16)
 - A: We do not expect the ESB to provide a certificate management infrastructure.
- 4. Q: Is the intention to do performance testing of automated business transactions, or simulations to guide the allocation of business assets (e.g. dollars, people, facilities, etc.)? Please describe the type of processes the County will need to test. (Requirement 34)

- A: The intent is to test / verify resource allocations, identify potential bottlenecks ahead of time.
- 5. Q: What is the County expected to derive in being able to "step in/out of modules?" Is it for the developer to debug? Please clarify and describe the use case. (Requirement 51)A: This refers to developer-level debugging.
- 6. Q: Is the County expecting to procure a separate BPM tool or is one already in place? Please describe the use case for a Form designer. (Requirement 62)
 - A: We expect to be able to procure one that is integrated with the ESB. Please provide pricing accordingly.
- 7. Q: Does the County foresee using the ESB for user interaction in addition to processing transactions? Do you expect end-users to interact directly with the ESB? Please describe the use case for portal execution. (Requirement 63)
 - A: We do not expect direct interaction. Use cases include web-facing (intra and internet) services to the county's citizens, peers, and partners.
- 8. Q: Is the County procuring a Business Rules Engine (BRE) separate from this RFP, that the ESB would integrate with, or is BRE already in place, or is the ESB expected to fulfill this function? (Requirement 65) A: Separate modules / add-ons / plugins OK, please provide pricing accordingly.
- 9. Q: Please describe what you mean by "visual workflow" associated with performance metrics. (Requirement 73)
 A: We would like to see the visualization of message flows at the business process design stage be extended to reveal bottlenecks at runtime. We think this is more intuitive than poring over transactions logs trying to identify bottlenecks.
- 10.Q: Is a reporting tool in place or expected as part of this RFP? What type of reports will the County need to provide to users? Please describe the use case for exporting the KPIs. (Requirement 84)
 A: We cannot anticipate all the types of reports that would be needed; we do however expect the ESB to make logs available for easy report generation.

11.Q: Can we get a one week extension, changing the deadline to January 3^{rd} ?

A: We are unable to extend the deadline.

12.Q: Is the County expecting the vendor to provide classroom training or an on the job mentoring for their resources, or a combination of both. Assuming that this is valid, may the vendor provide varied optional training by role, including classroom training, Instructor led online training, and virtual self-paced education. Are any options not permitted?

A: All options are permitted. Propose whatever training solution you think is best for your product. I anticipate in most cases a combination of training options will be proposed.

- 13.Q: Are you willing to consider a Message Queue based ESB as a Standards Based ESB? (Requirement 1)A: Yes, provided the environment provides JMS wrappers (Java Message Service).
- 14.Q: Is the County expecting the ESB Solution will have a Portlet container to host Portlets or UI components? (Requirement 3) A: We expect the vendors to price a container for supporting UI components. Technology comparable to portlets in terms of functionality is acceptable, please specify and price the requisite components.
- 15.Q: Must the ESB solution use the AMQP protocol directly, or is configurable email and SNMP support sufficient? (Requirement 9)A: Direct support is not needed at this time; this is an anticipated need. Please provide a roadmap or guidance on being able to interact with non-JAVA based messaging systems if AMQP is not supported.
- 16.Q: Is the County expecting a specialized adapter for this connectivity or will the County accept a MQ based connectivity to the Mainframe? (Requirement 10)

A: This requirement is specifically for an adapter for HP Nonstop Tandem.

17.Q: Is the County expecting coarse grained data access enforcement or a fine grained policy based data access enforcement? (Requirement 12)

A: We do anticipate both coarse-grained and fine-grained access controls. We would ideally like to see this functionality met with a component that executes in the ESB environment. We realize that such components might not exist, please identify the ease with which such components could be constructed. Please identify the interfaces provided by the platform to facilitate the internal development of such components.

18.Q: Can the County please elaborate on expose web service as a portlet? Is this related to the data in the portlet exposed via a web service or is the ESB expected to generate a portlet itself? (Requirement 25 & 26)

A: The ESB does not need to generate a portlets, however, we would like to be able easily expose certain web services (presumably connecting to a process flow on the ESB) to UI components. We would like this task to be automated / assisted to the extent possible. Alternates to portlets are OK.

19.Q: Can the County please elaborate on what "handle" means – is the ESB expected to introspect document formats or just route them? (Requirement 27 & 27a)

A: Just wrapped in suitable message containers and routed, introspection not needed

20.Q: Is the County expecting out of the box adapters or transformation or other forms of support for NIEM XML? Or is it the ability to import the schema and support the standards XML definition? (Requirement 27b)

A: Native NIEM awareness is not needed. The ability to import and handle complex NIEM schemas is mandatory

21.Q: Can the County please elaborate on this – does this relate to awareness of connectivity to services that are connected via the ESB – more like a 'ping' health check with retry capabilities or is the County open to the inclusion of Run Time Monitoring and Governance, ie: SLA based monitoring of the SOA components or external endpoints and ability to dynamically route based on backend not being available or rerouting based on web service slowdown, etc. Has the County considered a SOA Center of Excellence or have other RunTime Governance considerations factored in to any of the issued RFPs? Is this considered an in scope item for the effort? (Requirement 28) A: This is probably simpler than it seems. We simply require that the adapters / connectors to external systems monitor connections, detect and report failures and loss of connectivity to peer agencies. These alerts and failure notifications might need to be escalated based on the

county's requirements. The expectation from the ESB platform is to make this monitoring and detection as easy as possible

22.Q: Can the County provide examples for this requirement? And also there are a couple of reference to 'process' – is the County expecting support for business process kind of components in the ESB? Classically, ESB is a routing, mediation, and transformation SOA middleware linchpin. Please validate the high level use case of "ability to support BPM". (Requirement 34-36)

A: See response to 14

23.Q: Please clarify on the support for the Business Process in the ESB. Questions 57 and 58 talk specifically about process models – please elaborate on the support that is being requested for – BPEL/BPMN or any specific standards. (Requirement 44, 57, 58)

A: Specific standards are not required. The real desire is for a well-integrated toolset that helps with process design.

- 24.Q: While the term ESB has been used generically in the RFP document, it clearly looks like the County is looking for the following capabilities:
 - Business Process Management
 - Business Rules Management
 - Enterprise Integration
 - Enterprise Portal and Forms Support
 - Technology & Application Monitoring
 - Design Time and Run Time Governance of SOA components and Web Services
 - Business Monitoring & Analytics

Please validate the above as being in scope or out of scope for the iHub Project versus being strictly limited to the generic "ESB" definition. (Requirements 30, 60, 62, 63, 64, 84 & 85)

A: We are not limited to a strict ESB. Process management, ability to integrate easily with a variety of systems, being able to expose functionality as web services and UI components, monitoring, analytics, etc., are all considered to be in scope. We would like the toolset to facilitate the development, deployment, and maintenance of applications.

However, we are not sure about the need for a formal business rules engine.

Please provide an explanation and pricing for the 'Design Time and Run Time Governance of SOA components and Web Services' as identified above. We expect some of this to be a part of the toolset that does Enterprise Integration and business process design.

- 25.Q: What is the use case for ADFS? What are you trying to secure? e.g. user interaction? Transactions processed by the ESB? (Requirement 6) A: We expect to be able to do data level access controls based on the authorization profiles of the users who instigate queries or destination systems. We expect these profiles to be stored in an ADFS. We also expect to be able to manage these profiles OUTSIDE of the ESB toolset.
- 26.Q: Are you expecting the ESB to provide policy enforcement, or would access policies be provided by a 3rd party mediation layer that the ESB would work with? (Requirement 12)
 - A: We expect the ESB to provide hooks to help with this.
- 27.Q: Is the County expecting the ESB to support the County's existing certificate management infrastructure, or is the ESB expected to provide a certificate management infrastructure? Please describe. (Requirement 16)
 - A: We do not expect the ESB to provide a certificate management infrastructure.
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 - A: This refers to developer-level debugging.
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interact directly with the ESB? Please describe the use case for portal execution. (Requirement 63)

A: We do not expect direct interaction. Use cases include web-facing (intra and internet) services to the county's citizens, peers, and partners.

- 32.Q: Is the County procuring a Business Rules Engine (BRE) separate from this RFP, that the ESB would integrate with, or is BRE already in place, or is the ESB expected to fulfill this function? (Requirement 65) A: We are not entirely sure about the need for a dedicated BRE, but provide pricing decoupled from the rest of the components.
- 33.Q: Please describe what you mean by "visual workflow" associated with performance metrics. (Requirement 73)A: We would like to see the visualization of message flows at the business process design stage be extended to reveal bottlenecks at runtime. We think this is more intuitive than poring over transactions logs trying to identify bottlenecks.
- 34.Q: Is a reporting tool in place or expected as part of this RFP? What type of reports will the County need to provide to users? Please describe the use case for exporting the KPIs. (Requirement 84)

 A: We cannot anticipate all the types of reports that would be needed; we do however expect the ESB to make logs available for easy report generation.
- Q: Does Shelby County currently use a BPM tool? If so, which one?
 A: No, Shelby County does not have a BPM tool.
- 2. Q: Can Shelby County provide anticipated transactional volumes for the ESB?
 - A: 15,000 transactions a day is an extremely rough, estimate.
- 3. Q: Does the requirement to meet J2EE standards (requirement #2) apply to messaging only, or the ability to install and run any J2EE program on the ESB?
 - A: This requirement is about the manner in which web services and queues established as part of the info hub would be discovered by peers. The requirement applies to being able to discover both services and queues.